

DETAILED ACTION

Response to Amendment

1. The finality of the previous Final Rejection (dated 12/11/2008) is being withdrawn due to confusion resulting from a typographical error. Therefore, the previous action has been vacated and this office action is considered final.
2. Claims 5, 7, 8, 9, 13, 17, 18, 30, 33, 34 and 40-42 have been amended. Claim 6 has been canceled.

Information Disclosure Statement

3. The information disclosure statements filed on 8/14/2008 and 9/9/2008 have been considered previously and are signed copies are not included with this office action.

Response to Arguments

4. Applicant's arguments (dated 7/30/2008) with respect to claims 5, 7-9 and 12-42 have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments filed 2/11/2009 have been fully considered but they are not persuasive.
6. In response to the Applicant's argument regarding claim 5 that *the data being stored as described by Kurokawa is not representative of respective events between a start of suspension of operation of the application program and resumption of operation*

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of the application program at an end of the suspension (Page 14), the Examiner respectfully disagrees.

While the Examiner agrees that the novelty of Kurokawa is the ability to playback a video on a mobile phone, pause playback of the video because of an incoming call and once the call ends, resume playback of the video from the paused point. However, it is well within the scope of one of ordinary skill in the art to recognize that the main purpose of a mobile phone is the ability to receive/notify a user of an incoming call and that programs operating on the mobile phone will operate similarly to the playback of a video (*i.e.* be paused, complete the call, resume) as described by Kurokawa. This can be seen for example in the previous art of record, Hikishima (US-7,190,977) that enables a user to pause the playback of a videogame in order to answer a phone call, then resume playback of the videogame once the call has ended.

Further, it is well within the scope of one of ordinary skill in the art to recognize the ability of mobile phones to display a call history, as described by Alford (Col. 3 lines 58-65) and similarly in Kurokawa. (Col. 13 lines 10-14 and Col. 13 line 63 through Col. 14 line 4) The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history of Alford, interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (*i.e.* the incoming call is added to the list and if any other incoming calls were ignored during the call, those missed calls would be displayed as well), which corresponds to a resumed application

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program (call history) that is configured to adjust in accordance with the at least one of the event data indications (incoming calls, whether answered or missed) to be responsive to the cause of the suspension (resuming the viewing of the call history list once the call has ended with the new calls).

7. In response to the Applicant's argument regarding claim 5 that *the combination of Kurokawa and Alford is improper since the addition of Alford to Kurokawa renders Kurokawa unsatisfactory for its intended purpose and/or impermissibly changes the principal of operation of Kurokawa* (Page 15), the Examiner respectfully disagrees.

The Examiner's combination of Kurokawa in view of Alford does not stop Kurokawa from "moving picture reproduction", the Examiner is merely suggesting that the program of focus in the above example is not a "moving picture reproduction" but instead displaying a call history as described by Alford.

8. In response to the Applicant's argument regarding claim 5 that *Modification of Kurokawa with Alford as asserted in the office action results in suspension of Kurokawa's reproduction of a moving picture, and launching of Alford's display of call history* (Page 16), the Examiner respectfully disagrees.

Kurokawa teaches in Fig. 6 [6j and 6o] that the mobile phone is capable of maintaining and displaying a call history. The Examiner views this as the reason for Kurokawa to be able to incorporate Alford's ability to view call history as a stand-alone feature, much the same way the user can already view a "moving picture reproduction".

The Examiner's combination is not what the Applicant is asserting, *i.e.* suspension of Kurokawa's reproduction of a moving picture, and launching of Alford's

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display of call history. The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history as described by Alford, interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (*i.e.* the incoming call is added to the list and if any other incoming calls were ignored during the call, those missed calls would be displayed as well), which corresponds to a resumed application program (call history) that is configured to adjust in accordance with the at least one of the event data indications (incoming calls, whether answered or missed) to be responsive to the cause of the suspension (resuming the viewing of the call history list once the call has ended with the new calls).

9. In response to the Applicant's argument regarding claim 29 that *neither Kurokawa nor Alford teach or suggest a resumed application program operable to generate any form of message, and thus quite clearly cannot teach or suggest generation of such a message in response to receipt of a delivered stored event* (Page 17), the Examiner respectfully disagrees.

The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history as described by Alford, has the viewing interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (*i.e.* the incoming call is added to the list and if any other incoming calls

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were ignored during the call, those missed calls would be displayed as well), which corresponds to a resumed application program (call history) that is configured to adjust in accordance with the at least one of the event data indications (incoming calls, whether answered or missed) to be responsive to the cause of the suspension (resuming the viewing of the call history list once the call has ended with the new calls). Further, the Examiner views the updating of the call history as meeting the "generate the message in response to receipt of the delivered stored event data".

10. In response to the Applicant's argument regarding claim 30 that *neither Kurokawa nor Alford teach or suggest a processor configured to maintain as unchanged data input by a user and temporarily stored in a terminal device during operation of an application program* (Page 17), the Examiner respectfully disagrees.

Kurokawa teaches the ability to "Accept Settings For Reproduction" from the user (Fig. 2 [2a] and Fig. 6 [6a]) that are used for viewing the moving pictures throughout the interrupting/resuming process described in Fig. 6. Although this differs from the scenario described above for the independent claims, the Examiner views Kurokawa's teachings relating to the moving picture reproduction to be applicable to other programs that are capable of being run on the mobile phone.

11. In response to the Applicant's argument regarding claim 33 that *none of the cited references teach or suggest resumption of a suspended application program after a specified time has elapsed* (Page 17), the Examiner respectfully disagrees.

Monnes teaches a system and method for automatically updating outdated messages or deleting obsolete messages for an electronic device. Further, Monnes

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teaches in Fig. 6 the displaying of a pop-up window [56], detecting an event [62] and deleting the pop-up window [64], which corresponds to resuming a suspended program (not displaying a pop-up window) after a specified time has elapsed (Fig. 6 loops until an even is detected [62]) following display of the message (pop-up window on display).

12. In response to the Applicant's argument regarding claim 34, the Applicant's argument are viewed as being the same as those stated above in claim 29 and the rejections are maintained in view of the further explanation above.

13. In response to the Applicant's argument regarding claim 36, the Examiner views the Applicant's argument as being untimely. The Examiner's basic assertion that the use of flags, identifiers and tables as being well known to one of ordinary skill in the art has been in the Examiner's responses since 4/14/2008. Regardless, upon further review, Kurokawa teaches the use of a memory section that includes storing the correlated data due to the call reception information that interrupted the playback of moving picture reproduction. (Col. 13 lines 10-15)

14. In response to the Applicant's argument regarding claim 8, the Applicant's argument are viewed as being the same as those stated above in claim 5 and the rejections are maintained in view of the further explanation above.

15. In response to the Applicant's argument regarding claim 37, the Applicant's argument are viewed as being the same as those stated above in claim 30 and the rejections are maintained in view of the further explanation above.

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16. In response to the Applicant's argument regarding claim 23, the Applicant's argument are viewed as being the same as those stated above in claim 30 and the rejections are maintained in view of the further explanation above.

17. In response to the Applicant's argument regarding claims 25 and 26, the Examiner views the Applicant's argument as being untimely. The Examiner's basic assertion that the use of flags, identifiers and tables as being well known to one of ordinary skill in the art has been in the Examiner's responses since 4/14/2008. Regardless, upon further review, Kurokawa teaches the use of a memory section that includes storing the correlated data due to the call reception information that interrupted the playback of moving picture reproduction. (Col. 13 lines 10-15)

18. In response to the Applicant's argument regarding claim 27 that the *Applicant also respectfully traverses the assertions on page 6 of the office action regarding storage and maintenance of an application in volatile memory* (Pages 21-22), the Examiner respectfully disagrees.

Volatile memory is memory that loses anything that is stored in it once power is loss. RAM is volatile memory. ROM is memory that can withstand power loss yet retain the stored information. If required, further information can be seen in the definition of RAM on page 682 of Newton's Telecom Dictionary 20th Edition by Harry Newton that "The problem with RAM memory is that it's volatile. This means when power is turned off (or power glitches occur) RAM memory is erased."

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19. In response to the Applicant's argument regarding claim 28, the Applicant's argument are viewed as being the same as those stated above in claim 33 and the rejections are maintained in view of the further explanation above.

20. In response to the Applicant's argument regarding claim 39, the Applicant's argument are viewed as being the same as those stated above in claim 30 and the rejections are maintained in view of the further explanation above.

21. In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., "plurality of different screens for display to a user" [Pages 22-23]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Applicant's claim only requires one screen for display to a user. The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history of Alford, interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (i.e. the incoming call is added to the list and if any other incoming calls were ignored during the call, those missed calls would be displayed as well).

22. In response to the Applicant's argument regarding claim 41 (Pages 23-24), the Examiner views the Applicant's argument as being untimely. The Examiner's basic

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assertion that the use of flags, identifiers and tables as being well known to one of ordinary skill in the art has been in the Examiner's responses since 4/14/2008. Regardless, upon further review, Kurokawa teaches the use of a memory section that includes storing the correlated data due to the call reception information that interrupted the playback of moving picture reproduction. (Col. 13 lines 10-15)

The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history of Alford, interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (*i.e.* the incoming call is added to the list and if any other incoming calls were ignored during the call, those missed calls would be displayed as well), which corresponds to a resumed application program (call history) that is configured to adjust in accordance with the at least one of the event data indications (incoming calls, whether answered or missed) to be responsive to the cause of the suspension (resuming the viewing of the call history list once the call has ended with the new calls).

23. In response to the Applicant's argument regarding claim 42 that *instructions stored in the memory to generate a message originated from the resumed application in response to the extracted even data, wherein the message is configured to notify a user of the first predetermined event is not taught by Kurokawa nor Alford* (Page 25), the Examiner respectfully disagrees.

The Examiner's combination of Kurokawa in view of Alford is that instead of viewing a video as described by Kurokawa, if the user is displaying the call history as described by Alford, has the viewing interrupted by an incoming call, answers the incoming call, ends the call (all as described by Kurokawa in Fig. 6) and then resumes viewing the call history, the call history will be updated as to the reason of the interruption (*i.e.* the incoming call is added to the list and if any other incoming calls were ignored during the call, those missed calls would be displayed as well), which corresponds to a resumed application program (call history) that is configured to adjust in accordance with the at least one of the event data indications (incoming calls, whether answered or missed) to be responsive to the cause of the suspension (resuming the viewing of the call history list once the call has ended with the new calls). Further, the Examiner views the updating of the call history as meeting the "generate the message in response to receipt of the delivered stored event data".

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 5, 8, 9, 12, 16, 18, 20, 22-27, 29-32 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa et al. (US-7,016,706 hereinafter, Kurokawa) in view of Alford (US-5,634,196).

Regarding claim 5, Kurokawa teaches a terminal device (Fig. 1) which can multitask (Fig. 9), comprising:

a processor (Fig. 1 [200a]) configured to execute an operating system and to detect one of a predetermined set of events (Fig. 7 [704] and Col. 4 lines 26-34) that cause operation of an application to suspend (Col. 8 lines 1-3), the processor operable to generate event data indicative of a cause of suspension of the application program; (Fig. 6 [6j & 6n])

the processor further configured to suspend operation of an application program operable within the operating system when an event is detected; (Col. 8 lines 1-3 and Fig. 7 [704]) and

means for storing a plurality of event data indications; (Fig. 6 [6j & 6n] and Fig. 1 [140]) and

wherein the processing means is further configured to resume operation of the application program suspended by the processor (Fig. 6 [6k]), and the event data indications each represent respective events between a start of suspension of operation of the application program and resumption of operation of the application program at an end of the suspension. (Fig. 6 [6j])

Kurokawa differs from the claimed invention by not explicitly reciting the processor is further configured to deliver at least one of the stored event data indications to the resumed application program, wherein operation of the resumed application program is configured to adjust in accordance with the at least one of the event data indications to be responsive to the cause of the suspension.

In an analogous art, Alford teaches a method, system and device that enables a user to view the call history to a mobile device. (Col. 3 lines 58-60) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to substitute the running of the moving picture reproduction program of Kurokawa with the displaying call history of Alford since Kurokawa already enables a user to view missed calls during multi-tasking (Kurokawa Fig. 6 [6j]), therefore it is obvious that a user would be able to view the call history at any desired time.

Kurokawa in view of Alford teaches processor is further configured to deliver at least one of the stored event data indications to the resumed application program, wherein operation of the resumed application program is configured to adjust in accordance with the at least one of the event data indications to be responsive to the cause of the suspension. (If a user is viewing the call history and is interrupted by a call, when the user resumes viewing the call history, the call history will be changed by showing at least the interrupting call)

Regarding claim 8, the limitations of claim 8 are rejected as being the same reason set forth above in claim 5.

Regarding claim 9, the limitations of claim 9 are rejected as being the same reasons set forth above in claim 5 and below in claim 29.

Regarding claim 12, Kurokawa in view of Alford teaches wherein instructions stored in the memory to generate a message comprise instructions stored in memory to generate a query to a user that is related to the first predetermined event. (Kurokawa Fig. 8 [82] and Fig. 9 [85])

Regarding claim 16, Kurokawa in view of Alford teaches the first predetermined event comprises receipt by the terminal device of an email or a call request. (Kurokawa Fig. 6 [6d])

Regarding claim 18, Kurokawa in view of Alford teaches wherein the application is a first application, and the first predetermined event comprises execution of a second application by the first application. (Kurokawa Fig. 6 [6c, 6d & 6j])

Regarding claim 20, Kurokawa in view of Alford teaches the second predetermined event comprises a user command. (Kurokawa Fig. 6 [6f & 6g])

Regarding claim 22, Kurokawa in view of Alford teaches the second predetermined event comprises completion of the first predetermined event. (Kurokawa Fig. 6 [6e])

Regarding claim 23, Kurokawa in view of Alford teaches instructions stored in memory to suspend the application comprises instructions stored in the memory to, during the suspension, maintain application related data in volatile memory that was input by a user prior to suspension. (Kurokawa Fig. 2 [2a & 2b], Col. 8 lines 22-28)

Regarding claim 24, Kurokawa in view of Alford teaches instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the suspended application in volatile memory during the suspension. (Kurokawa Col. 8 lines 22-30)

Regarding claims 25, 26 and 36, Kurokawa in view of Alford teaches the limitations of claims 5 and 9 above, but differs from the claimed invention by not explicitly reciting the use of a flag, an identifier or storing the identifier in a table.

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However, one of ordinary skill in the art would recognize the use of flags, identifiers and organizing information in tables as being well known in the art and easily implemented in software design, therefore the rejection of claims 25, 26 and 36 are maintained as being obvious in view of the specific citations related to claims 5 and 9 above.

Regarding claim 27, Kurokawa in view of Alford teaches instructions stored in memory to store the application in volatile memory when the application is launched, and instructions stored in memory to suspend the application comprises instructions stored in memory to maintain the application in the volatile memory until execution is resumed. (Kurokawa Col. 8 lines 22-30)

Regarding claim 29, Kurokawa in view of Alford teaches a display means for displaying information to a user (Kurokawa Fig. 5 [171]), the display means operable to display a message related to the cause of the suspension (Kurokawa Fig. 6 [6j]), the resumed application program operable to generate the message in response to receipt of the delivered stored event data. (Alford Col. 3 lines 58-60: If a user is viewing the call history and is interrupted by a call, when the user resumes viewing the call history, the call history will be changed by showing at least the interrupting call)

Regarding claim 30, the limitations of claim 30 are rejected as being the same reason set forth above in claim 23.

Regarding claim 31, Kurokawa in view of Alford teaches the resumed application program is configured to generate a message to notify a user of the cause of the suspension based on the stored event data. (Kurokawa Fig. 6 [6j])

Regarding claims 32 and 38, the limitations of claims 32 and 38 are rejected as being the same reasons set forth above in claim 16.

Regarding claim 35, Kurokawa in view of Alford teaches the data related to the application program that is input by the user remains in random access memory after operation of the application program is suspended. (Kurokawa Fig. 6 [6a & 6b] and Col. 8 lines 22-30)

Regarding claim 37, the limitations of claim 37 are rejected as being the same reason set forth above in claim 35.

Regarding claim 39, the limitations of claim 39 are rejected as being the same reason set forth above in claim 35.

Regarding claims 40-42, Kurokawa in view of Alford teaches the limitations of claims 5, 8 and 9 above, but differs from the claimed invention by not explicitly reciting the use of a flag, an identifier or storing the identifier in a table. However, one of ordinary skill in the art would recognize the use of flags, identifiers and organizing information in tables as being well known in the art and easily implemented in software design, therefore the rejection of claims 40-42 are maintained as being obvious in view of the specific citations related to claims 5, 8 and 9 above.

26. Claims 7, 13-15, 17, 19, 21, 28, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurokawa in view of Alford and Monnes et al. (US-6,459,440 hereinafter, Monnes).

Regarding claim 7, Kurokawa in view of Alford teaches a means for communicating via a communication network (Kurokawa Fig. 1), and wherein:

the processor is further configured to suspend operation of the application program (Fig. 6 [6d]) when the means for communicating receives a call designating a user of the terminal device. (Fig. 6 [6c & 6d]) Kurokawa in view of Alford differs from the claimed invention by not explicitly reciting the suspension occurs because a message is received.

In an analogous art, Monnes teaches receiving short messages and accumulating the number of messages received. (Col. 1 lines 44-61) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to be motivated to implement the terminal device of Kurokawa in view of Alford after modifying it to incorporate the receiving of short messages of Monnes since using short messages for communications on a mobile device is well known in the art. (Col. 1 line 44-61)

Regarding claim 13, Kurokawa in view of Alford and Monnes teaches wherein the application is a first application, and instructions stored in the memory to generate a message comprises instructions stored in memory to generate a query to a user to launch a second application to attend to the first predetermined event. (Monnes Fig. 2 [21] "Read now" and Kurokawa Fig. 6 [6d & 6h])

Regarding claim 14, Kurokawa in view of Alford and Monnes teaches the message comprises an audio message. (Kurokawa Fig. 6 [6c & 6d])

Regarding claim 15, Kurokawa in view of Alford and Monnes teaches the message comprises a text message. (Monnes Fig. 2 [10 & 19])

Regarding claim 17, Kurokawa in view of Alford and Monnes teaches the first predetermined event comprises receipt or transmission by the terminal device of data via a short range transmission comprising Bluetooth transmission or infrared transmission. (Monnes Col. 1 lines 44-61 and Col. 5 line 17)

Regarding claim 19, the limitations of claim 19 are rejected as being the same reason set forth above in claim 6.

Regarding claim 21, Kurokawa in view of Alford and Monnes obviously teaches the second predetermined event comprises expiration of a determined time period since the notification of an incoming call only occurs for a specified period before the call is directed to a voicemail service.

Regarding claim 28, Kurokawa in view of Alford and Monnes teaches instructions stored in memory to delete the stored event data when execution of the application is resumed. (Monnes Col. 5 lines 35-49)

Regarding claim 33, Kurokawa in view of Alford and Monnes teaches the response to the event being receipt of an email message, the processor is further configured to resume operation of the suspended application program after a specified time has elapsed following display of the message. (Monnes Fig. 6 [56, 58, 62 and 64])

Regarding claim 34, Kurokawa in view of Alford and Monnes teaches the processor is further configured to generate difference messages that originate from the resumed application program dependent on the cause of the suspension. (Monnes Fig. 1 [19] and Col. 1 lines 57-61 and Kurokawa Fig. 6 [6j])

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/MATTHEW SAMS/
Examiner, Art Unit 2617

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617